

~~CTIRAD, John~~; SCHINDLER, Jiri; VANECEK, Rudolf

Susceptibility of young rats to strains of Brucella of varying virulence. J. Hyg. Epidem., Praha 1 no.3:342-352 1957.

1. Department of Medical Microbiology & immunology, Charles University, Prague 2nd Department of Pathology, Charles University, Prague.

(BRUCELLA, infect.

susceptibility of young rats to strains of varying virulence)

CZECHOSLOVAKIA/Microbiology. Hemoglobinophilic Bac- F-5
teria. Brucellae

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 62446

Author : John Stirad, Vanocok Rudolf
Inst : -
Title : Formation of Antibodies and Tissue Changes in
Experimental Brucellosis in Young Rabbits.

Orig Pub : Goskosl. epidemiol., mikrobiol., immunol., 1957,
6, No 1, 12-19

Abstract : Intracerebral infection of young rabbits with
highly virulent brucellae, strain Brucella abortus
2119 in a quantity of 2×10^8 , produced the
development of fatal brucellosis: 3-week rab-
bits died in the course of 6, and 4-week in the
course of 8, days. The brucellae were ob-
tained from bone and cephalic marrow, the spleen,
and liver. In the blood serum of the inoculated

Card : 1/3

36

CZECHOSLOVAKIA/Microbiology. Hemoglobinophilic Bac- F-5
APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00050942
teria. Brucellae

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 62446

animals, agglutinins and complement-binding anti-
bodies were found in the course of a week af-
ter infection, and in the course of 16 days--
in the extracts from the bone marrow and spleen
of the dead animals. In the course of the
first days after infection of 3-week old rab-
bits with B. abortus (strain 1914), the spleen
and bone marrow extracts showed incomplete
antibodies. The final ones were also observed
in blood serum and in the extracts of the liver,
spleen, and bone marrow on the 11th day after
subcutaneous introduction of live vaccine VA
into 8-day-old rabbits. From that very day it
is possible to discover antibodies in the blood
serum binding the complement, whereas in ex-
tracts from organs, the latter appeared only
after 19 days following vaccination. Tissue

Card : 2/3

KECOVA, Helga; CTIRAD JOHN

Increased susceptibility to infection in agammaglobulinemia. Cas. lek. cesk. 97 no.26:801-807 27 June 58.

1. Klinika nemoci vnitřních lékařské fakulty hygienické KU v Praze. Prednosta prof. Dr. Vratislav Jonas. Ustav pro lékařskou mikrobiologii a imunologii KU v Praze. Prednosta prof. Dr. Frantisek Patocka. H. K., Praha 12, Pod Terebkou 4.

(AGAMMAGLOBULINEMIA, case reports

with lymphatic leukemia & resp. & skin infect. (Cz))

(LEUKEMIA, LYMPHATIC, case reports

with agammaglobulinemia & resp. & skin infect. (Cz))

(RESPIRATORY TRACT, infect.

with agammaglobulinemia, lymphatic leukemia & skin infect. (Cz))

(SKIN, dis.

infect., with agammaglobulinemia, lymphatic leukemia & resp.

infect. (Cz))

L 06097-67 EWP(t)/ETT LIP(c) JD/JH
ACC NR: AP6017905 (A) SOURCE CODE: CZ/0078/65/000/012/0023/0023

INVENTOR: Hittmann, Arnost (Jablonec nad Nisou); Ctveracek, Karel (Graduate economist;
Jablonec nad Nisou)

ORG: none

TITLE: [A method for the direct galvanizing of aluminum] CZ Pat. No. PV 3840-64,
Class 48

SOURCE: Vynalezky, no. 12, 1965, 23

TOPIC TAGS: aluminum plating, aluminum, electroplating

ABSTRACT: A method for the direct galvanizing of aluminum and its alloys, with the alloy of copper and tin in an alkali, cyanide solution is described which has the distinguishing feature that the solution contains, for 1 liter 5 to 40 g of copper in the form of a cyanide complex, 10 to 30g of free, pure cyanide, 6 to 20g of sodium hydroxide or pure potassium hydroxide, 40 to 60g of pure sodium-potassium tartrate, 20 to 65g or sodium stannate, or pure potassium stannate, 0.5 to 2.0g of pure lead acetate, 0.05 to 5.0g of binaphthyl methane sodium or potassium sulphonate, 0.05 to 0.5g of a surface active substance at a temperature of 40 to 65°C. An anode is used made of an alloy of copper and tin in proportions of 10 to 70% copper, and of 30 to 90% tin respectively.

SUB CODE: 07,13/ SUBM DATE: 03Jul64

Card 1/1 LC

CTVRTECK, L.

Protection of transmission lines with branches. p. 306.

ENERGETIKA. Praha, Czechoslovakia. Vol. 9, No. 6, June 1959

Monthly list of East European Accessions, (EEAI) LC, Vol. 8, No. 10
Oct. 1959.
Uncl.

CTVRTECKA, Lubomir

Distance and differential protection of bus bars in extra
high voltage switch plants. El teck obzor 53 no. 2:73-77
F '64.

1. Zavody prumyslove automatizace - Krizik, Trutnov.

CTVRTNICEK, Karel

Automation of the Qu 24 spectrograph. Hut listy 18 no.5:359-360 My '63.

1. Kralovopolska strojirna, n.p., Brno.

CTVARTAK 10340

3,4-Dimethoxybenzylchloride. Josef Ctvrtak. Czech.
84,221, May 1, 1955. A mixt. of 125 g. veratol, 30 g.
HCHO, and 150 g. CHCl₃:CCl₄ is satd. at 15° with HCl
in the presence of CaCl₂ yielding 3,4-dimethoxybenzyl-
chloride (69% of theory) suitable for use in the synthesis
of papaverine. L. J. Urbánek

10340

XV
3,4-Dimethoxybenzyl chloride. Josef Čižmár. Czech.
85,335, Dec. 1, 1955. Veratrole (1,3-dimethoxybenzene) heated with
HCOH and aq. HCl in the presence of anhyd. CaCl_2 which
removes water and catalyzes the reaction. To a mixt. of
138 g. 1, 120 ml. $\text{CHCl}_3\text{:CCl}_4$, 33 g. paraform, and 244 g.
 CaCl_2 is added at 15-20° under stirring within 45 min. 212
g. 25% HCl and stirred another 45 min. the cryst. CaCl_2
sepd, and the soln. worked up in the usual way yields 60%
3,4-(MeO) $_2\text{C}_6\text{H}_3\text{CH}_2\text{Cl}$. L. J. Urbánek

PM

CTVRNIK, Josef

12 p, 8/01

DWP 13 344

Akt.-Z.: WP 12 p/38 280

Erf.: Dr. Josef Ctvrník, Olomouc;

Dr. Oldřich Nemeček, Praha;

Jirí Mayer, Brno

Inh.: Synfarma, národní podnik, Dolní Mecholupy (CSR)

Verfahren zur Herstellung von 4-substituierten 1,2-Diaryl-
3,5-dioxypyrazolidinen.

19. 8. 1955

SO: Erfindungs und Vorschlagswesen (Berlin), 7/1, January 1958, p. 105.

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00050942

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00050942(

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00050942

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00050942(

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00050942

2

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00050942(

July 15, 1938. Treatment of 1,2-diaryl-3,5-dioxopyrazoli-

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00050942

CHAPTER 1

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00050942(

CTVCTA.K T. 1. 1

CZECHOSLOVAKIA / Organic Chemistry. Synthesis

G-2

Abs Jour: Ref Zhur-Khimiya, No 3, 8338.

Author : Ctvrtnik, Josef., Mayer, Jiri., Nemecek, Oldrich.,
Horakova, Zdena.

Inst : Not given.

Title : New Derivatives of 1,2-Diphenyl-3,5-Diketo-Pyrazolidine.

Orig Pub: Ceskosl. farmaz., 1958, 7, No 6, 303-304.

Abstract: Gamma-chlorocrotyl-malonio ester (I) condensed with hydrazo-benzene (II) to 1,2-diphenyl-4-(gamma-chlorocrotyl)-3,5-diketo-pyrazolidine (III), which was also prepared by alkylation of 1,2-diphenyl-3,5-diketo-pyrazolidine with 1,3-dichlorobutene-2 in aqueous alcoholic solution of NaOH. Treatment with H₂SO₄ converts III to 1,2-diphenyl-4-(gamma-ketobutyl)-pyrazolid-

Card 1/2

CZECHOSLOVAKIA / Organic Chemistry. Synthesis.

G-2

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 8338.

Abstract: ine-dione-3,5 (IV), the Na-salt of which is readily soluble in water. To a solution of 2 g Na in 40 ml alcohol are added 21.5 g I and 16 g II, the mixture is heated, driving off the alcohol, 50 ml water are added, and the batch is acidified to get III, yield 20 g, MP 167-168° (corrected; from acetone). To 10 g III in 150 ml CCl₄ are added dropwise 20 ml concentrated H₂SO₄, stirred for about 2 hours, the acid layer is mixed with 1 liter of ice water, and IV is separated, yield 8.6 g, MP 120° (corrected; from alcohol); semi-carbazone, MP 172°. -- D. Vitkovskiy.

Card 2/2

LENFELD, J.; KROUTIL, M.; BOCEK, M.; CTVRTHNIK, J.; MAYER, J.

Toxicity and anti-inflammatory effects of chlorocrotylpyrazolidine.
Cesk. fysiол. 9 no.1:87-88 Ja 60.

1. Farmakologicky a histologicky ustav lek. fak. PU a Farmakon, n.p.,
Olomouc.

(PHENYLEBUTAZONE, rel. cpds.)

KROUTIL, M.; LENFELD, J.; CTVRTHNIK, J.; MAYER, J.

Anti-inflammatory activity of new trasentin derivatives. Cesk.
fysiol. 9 no.3:294-295 My '60.

1. Katedra farmakologie lek. fak. PU a Farmakon n.p., Olomouc.
(PARASYMPATHOLYTICS pharmacol)
(INFLAMMATION exper)

MATUROVA, M.; TSCHU SHUN, J.; CTVRTNIK, J.; SANTAVY, F.

Polarography of alkaloids. XXV. Polarography of some papaverine derivatives. Coll Cz Chem 25 no.12:3321-3329 D '60.
(EEAI 10:9)

1. Chemisches Institut, Medizinische Fakultät, Palacky-Universität,
Olomouc, und Farmakon, Olomouc.

(Polarograph and polarography) (Alkaloids)
(Papaverine)

3
CIVILIAN, M.

STROJIRENSTVI (Machinery)

CZECHOSLOVAKIA/Physical Chemistry. Electrochemistry.

D

Abs Jour: Ref Zhur-Khin., No 5, 1959, 14770.

Author : Kunes J., Ctvrtnik V.

Inst :

Title : Basic Principles for the Measurement of Potential
Gradients in an Electrolytic Bath.

Orig Pub: Strojirenstvi, 1958, 8, No 6, 459-463.

Abstract: A method for the measurement of a potential gradient
by double probe is described. Instruments, permitting
the carrying out of the measurements, correct to $\pm 0.5 -$
1%, are described. -- Authors' resume.

Card : 1/1

CTVRTNIK, V.; KUHLS, J.

Use of electric models in research of flow in bladed wheels. p. 582

STROJIRENSTVI (Ministerstvo tezkého strojírenství, Ministerstvo všeobecného
strojírenství) Praha, Czechoslovakia, Vol. 9, no. 8, Aug. 1959

Monthly List of East European Accessions (EEAI), IC, Vol. 9, no. 2,
Feb. 1960

Uncl.

Z/032/60/000/02/002/023

E073/E535

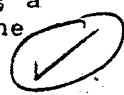
AUTHORS: Kuneš, J., Engineer and Čtvrtník, V., Engineer

TITLE: Determination of the Temperatures in the Rotor¹⁶ and Vanes of Gas Turbines by Means of Electrical Analogues

PERIODICAL: Strojirenství, 1960, Nr 2, pp 83-88

ABSTRACT: The only paper known to the authors concerning application of the electrothermal analogy for studying the temperature fields in cooled gas-turbine blades⁷⁶ deals with the analogy study of the temperature distribution in cooled gas-turbine blades (G.F.Kettleborough, Brit. Journ. Appl. Phys., 1955, Nr 6). His paper is too brief and too general. Litvinov (Ref 7) deals with determination of the steady-state temperature fields in cooled turbine blades and discs by the electrical-analogy method; Shvets, Gerashchenko and Dyban (Ref 10) published results of investigations of the temperature fields at the roots of gas-turbine blades. In Czechoslovakia the electrothermal-analogy method was little used until very recently; a problem which has been solved (Ref 4) is that of the

Card 1/4 combined solution of the temperature fields



Z/032/60/000/02/002/023
E073/E335

Determination of the Temperatures in the Rotor and Vanes of
Gas Turbines by means of Electrical Analogues

in the rotor and in the blades of gas turbines. In this paper the process of producing an analogue is dealt with in great detail and the problem of simulation of the boundary conditions of the rotor and the blades is solved. A further Czech paper (Ref 5) deals with investigation of the temperature fields in internally-cooled gas-turbine blades. A method is described of measuring the temperatures in the rotor, blade and blade root of a gas turbine by electrothermal analysis and the procedure to be applied in simulating by means of an electrolytic model is elucidated. The accuracy of measurement is verified by comparing the measured and the calculated values for discs of constant and of hyperbolic cross-section, assuming equal boundary conditions; the inaccuracy was found to be less than 0.5%. In Figure 1 a diagrammatic sketch is given of a cooled rotor of a turbine. In Figure 2 a blade lattice is diagrammatically represented. Figure 3 shows the connection of electrodes for an analogue of the blades. Figure 4 shows the connection

Card 2/4

Z/032/60/000/02/002/023

E073/E335

Determination of the Temperatures in the Rotor and Vanes of
Gas Turbines by means of Electrical Analogues

of the electrodes for an analogue of the blade roots. The principles of producing analogues, selection of optimum electrodes and an electrolyte were dealt with in an earlier paper by the authors (Ref 1). In this paper, the actual process of carrying out the analogue tests is described, whereby a sketch, Figure 5, shows the procedure to be applied in working with the analogue. Figure 6 shows a photo of an electrical analogue of a blade. Figure 7 shows a photo of the analogue of the blade root and Figure 8 shows the photo of an analogue of the rotor. An example is described in which the temperature field was determined for a single-stage gas turbine which was cooled by air flowing along the faces of the runner wheel. In Figure 9 the temperature distribution in the blade is graphed on the assumption that the temperature of the cooling air is constant and has the values of 140 and 180 °C, respectively. Figure 10 shows the temperature

Card 3/4

Z/032/60/000/02/002/023
E073/E335

**Determination of the Temperatures in the Rotor and Vanes of
Gas Turbines by means of Electrical Analogues**

drop in the root of the blade. Figure 11 shows the temperature field in the runner wheel. Figure 12 shows the resultant temperature characteristic in the rotor. It is concluded that this method is suitable and convenient for solving a number of problems relating to the construction of gas turbines and other power-generating equipment.

There are 12 figures and 26 references, of which 5 are Czech, 5 English, 7 German and 9 Soviet. (✓)

ASSOCIATION: VŠSE, Pilsen

Card 4/4

26.2124

²¹¹⁰⁷
Z/041/61/000/002/001/001
E073/E335

AUTHORS: Kuneš, J. and Čtvrtník, V., Engineers

TITLE: An Analogue Study of Cooling Turbine Blades

PERIODICAL: Strojnícky časopis, 1961, No. 2, pp. 79 - 98

TEXT: H.H. Ellerbrock et al (Ref. 10: NACA, T.N. 3060, 1953) report on the use of electric analogues for calculating the temperature distribution of cooled turbine blades. In this paper the authors report the application of an electrical analogue for determining the stationary temperature fields and the thermo-elastic stresses in the transverse section of cooled turbine blades. In the first section of the paper the cooling methods (gas, liquid) are briefly reviewed, quoting data from the literature. Following that, a brief mathematical analysis is given of the heat transfer from the working gas into the blade, from the blade into the coolant and of the temperature field and the blade stresses. The method of electrical analogy is based on applying the results derived by Livingood and Brown (Ref. 25: NACA Rep. 994, 1950; Ref. 26: NACA Rep. 1066, 1950) and giving an approximate analytical solution using the Card 1/7

x

An Analogue Study

21101
Z/041/61/000/002/001/001
E073/E335

method of stress relaxation. The analogy between the Laplace equation

$$\nabla^2 T = \frac{\partial^2 T}{\partial x^2} + \frac{\partial^2 T}{\partial y^2} = 0 \quad (10)$$

and the distribution of electrical potentials on a model produced from a conductor of the same shape as a blade with similar boundary conditions, expressed by:

$$\nabla^2 V = \frac{\partial^2 V}{\partial x^2} + \frac{\partial^2 V}{\partial y^2} = 0 \quad (18)$$

is utilised for simulating the cooling conditions on the turbine blade. A detailed description of the applied technique is contained in earlier work of the authors (Ref. 18: Strojírénství, Vol.10, No.1, 1960; Ref. 33 - Výzkumná zpráva VSSE, Pilsen, TM 6, 1960). Fig. 4 shows the analogue of a turbine blade with five cooling channels.

Card 2/7

An Analogue Study

21101
Z/041/61/000/002/001/001
E073/E335

The experiments were made for working-gas temperatures of 1 000 °C. Fig. 8 shows the temperature field of several blades under investigation, for a ratio of the external heat-transfer coefficient of the turbulent and laminar boundary layers on the profile $\alpha_{\text{turb}}/\alpha_{\text{lam}} = 1000/500 \text{ kcal/m}^2 \text{ h } ^\circ\text{C}$ and a coefficient of thermal expansion of the blade material $\lambda = 20 \text{ kcal/m hrs } ^\circ\text{C}$. Fig. 8a applies to a hollow, air-cooled blade with a blade-to-coolant heat-transfer coefficient $\alpha_{\text{ch}} = 200 \text{ kcal/m}^2 \text{ hrs } ^\circ\text{C}$. Fig. 8b applies to a blade with 21 cooling channels arranged at the periphery, $\alpha_{\text{ch}} = 2\,500 \text{ kcal/m}^2 \text{ hrs } ^\circ\text{C}$. Fig. 8c applies to a blade with 5 cooling channels, $\alpha_{\text{ch}} = 2\,500 \text{ kcal/m}^2 \text{ hrs } ^\circ\text{C}$. Fig. 8d applies to a blade with 2 cooling channels $\alpha_{\text{ch}} = 5\,000 \text{ kcal/m}^2 \text{ hrs } ^\circ\text{C}$. In addition, plots are included, giving the temperature curves for 3 blades with various arrangements of the coolant channels (Fig. 9). Furthermore, plots are

Card 3/7

21101

Z/041/61/000/002/001/001

E073/E335

An Analogue Study

included of the effect of the external heat-transfer coefficient on the blade temperature curve; the effect of the internal heat-transfer coefficient on the blade temperature conditions; the effect of the thermal conductivity of the blade material on the blade temperature conditions. The method proved very useful; it enabled more accurate studies within a short time, even if the problems were three-dimensional with arbitrarily complex boundary conditions. In the given case, electrical analogy enables solution of the biharmonic equation expressing the thermo-elastic stress distribution in the blade. The here described method can also be used for solving problems of unsteady temperature fields in turbine blades by means of resistance networks. (Abstracter's note: an English-language article on the subject with the title "An Analogue Study of Turbine-blade Cooling" has been published in "Technical Digest", 1960, No. 11, pp. 4 - 11.) There are 12 figures, 1 table and 35 references:

Card 4/7

An Analogue Study

21101
Z/041/61/000/002/001/001
E073/E335

4 Czech and 31 non-Czech. The four latest English-language references are: Ref. 11 - Esgar, J.B. Turbine Cooling. Trans. ASME-Journal, Engng. for Power, July, 1959; Ref. 14 - Grootenhuis, P. The mechanism and application of effusion cooling. Journ. R.A.S. Vol.63, No.578, Feb. 1959; Ref. 15 - Hodge, R.I., Johnson, J.H. A review of blade-cooling systems. The oil engine and gas turbine, Nos. 1-3, 1958; Ref. 22 - Lang, R., Petrick, E.N. Application of electrical analogue theory in the preliminary design of air-cooled turbines. ASME gas turbine power conference, 1959. ref. No. 59-GTP-15.

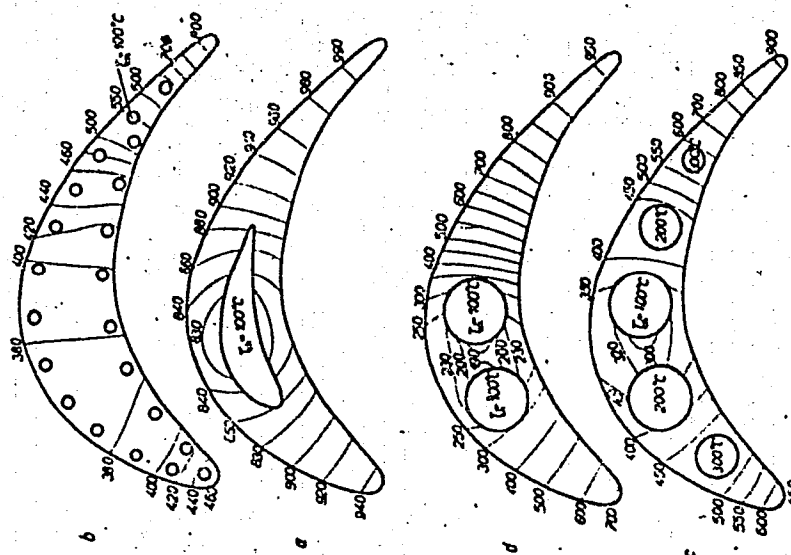
ASSOCIATION: Vysoká škola strojní a elektrotechnická v
Plzni (School for Mechanical and Electrical
Engineering, Pilsen)

SUBMITTED: March 5, 1960

Card 5/7

An Analogue Study

Fig. 8:



Card 6/7

21101

Z/041/61/000/002/001/001
E073/E335

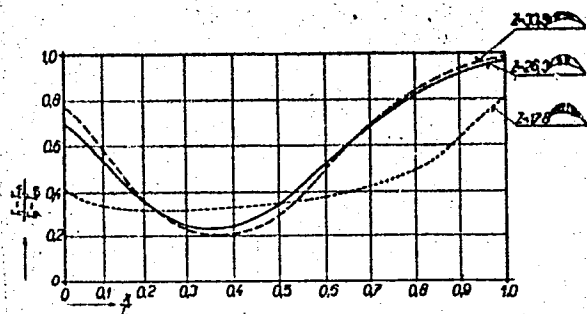
Fig. 8 on page 93 is attached to photo.

21101

Z/041/61/000/002/001/001
E073/E335

An Analogue Study

Fig. 9:



Card 7/7

ACCESSION NR: AP4031724

Z/0042/64/000/004/0213/0225

AUTHOR: Ctvrtnik, Vaclav (Engineer)

TITLE: Investigation of magnetic eddy-fields with an electric model made from conductive paper

SOURCE: Elektrotechnicky casopis, ¹⁵⁻no. 4, 1964, 213-225

TOPIC TAGS: magnetic eddy field, eddy field, magnetic field, electric modelling, plane magnetic field, dissipation field, conductive paper, electromagnetism, electromagnetic field

ABSTRACT: The application of an electric analogy for the solution of flat magnetic fields including the eddy zone and its configuration is described. Special attention is given to dissipation fields in d.c. machines, but the given procedures can be easily extended to other types of electromagnetic circuits. It is shown that the modelling of flat fields on electric conductive paper gives for current cases precise enough results (1 to 3%). The model is cheap and can be quickly and cheaply made. The measuring device is also relatively small, simple and reliable. Orig. art. has: 10 graphics.

Cord 1/2

ACCESSION NR: AP4031724

ASSOCIATION: Vysoka skola strojni a elektrotechnika, Plzen (Higher School of Construction and Electrical Technology)

SUBMITTED: 15Mar63

DATE ACQ: 28Apr64

ENCL: 00

SUB CODE: EM

NO REF SOV: 010

OTHER: 010

Card 2/2

CTVRTNIK, Vaclav, inz.

Cybernetic improvement of measurement apparatus. Automatizace
6 no.5:131 My '63.

CTYROKY, P.

"Two sea anchins from the Helvetian of Western Slovakia."

p. 233 (Casopis Pro Mineralogii A Geologh. Vol. 2 no. 3, 1957, Czchoslovakia)

Monthly Index of East European Accessions (KEAI) LC. Vol. 7, No. 2
February 1958

CTYROKY, P.

"Preliminary report on the paleontologic revision research, at Jaklovec in Ostrava"

p. 71 (Central Geologic Institute, Czechoslovak Academy of Sciences) Vol.33, no. 1, 1958

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 5, May 1958

CTYROKY, Pavel

SURNAME (in caps); Given Names

Country: Czechoslovakia

Academic Degrees: /not given/

Affiliation: Central Institute of Geology (Ustredni ustav geologicky),
Prague.

Source: Prague, Vestnik Ustredniho Ustavu Geologickeho, Vol XXXI,
No 2, March 1961, pp 141-143.

Data: "Revision of the Aquitanian Fauna From Velke Pavlovice in
Moravia."

123

19

ca

The specifications for lead glasses in Czechoslovakia.
V. Ceyroky and M. Panderlik. *Skladby Masla* 1936.
129; Chem. Obsv 12, Abstracts, 100; cf. C. A. 31, 3651.
—Analysis of glass at the institute showed that the PbO
content was not an adequate criterion for evaluating the
optical qualities of native or imported glasses. Accord-
ingly the authors det. the n and the relative dispersion
before they analyze the glass for PbO. Frank Marsh

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100
 101
 102
 103
 104
 105
 106
 107
 108
 109
 110
 111
 112
 113
 114
 115
 116
 117
 118
 119
 120
 121
 122
 123
 124
 125
 126
 127
 128
 129
 130
 131
 132
 133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESSES AND PROPERTIES INDEX																																																			
<p>The significance of the rare earths for the glass industry. V. ČERNÝ. <i>Sklářské Rozhledy</i> 2, 23-33 (1938); <i>Chem. Ostrov</i> 14, 174; cf. C. A. 32, 8715f. C. analyzes the many fractions of minerals which remain unused after the Th has been sepd. from its ores. By means of computations he gives several compns. which ought to improve present glasses in certain characteristics. Frank March.</p>																																																			
A 50.51A METALLURGICAL LITERATURE CLASSIFICATION																										FROM: ROMANY																									
FROM: STANISLAV																										FROM: ONE ONLY 141																									
FROM: #4																										FROM: ONE ONLY 141																									

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESS AND PROPERTIES INDEX																			
<div style="position: relative;"> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">19</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">20</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">21</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">22</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">23</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">24</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">25</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">26</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">27</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">28</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">29</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">30</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">31</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">32</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">33</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">34</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">35</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">36</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">37</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">38</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">39</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">40</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">41</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">42</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">43</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">44</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">45</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">46</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">47</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">48</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">49</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">50</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">51</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">52</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">53</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">54</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">55</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">56</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">57</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">58</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">59</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">60</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">61</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">62</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">63</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">64</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">65</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">66</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">67</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">68</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">69</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">70</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">71</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">72</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">73</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">74</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">75</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">76</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">77</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">78</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">79</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">80</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">81</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">82</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">83</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">84</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">85</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">86</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">87</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">88</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">89</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">90</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">91</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">92</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">93</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">94</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">95</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">96</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">97</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">98</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">99</div> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">100</div> </div>																			
<p>The transmission of ultraviolet rays by window glass.</p> <p>Kaplan, J. and M. Panderlik. <i>Skripty Rukhly 2</i>, 51-8(1938); <i>Chem. Obozr</i> 18, 174.—The spectrographic analysis of window glasses prepd. currently in Czechoslovakia and in Austria shows that these glasses are transparent to ultraviolet rays. An arc spectrum, after passing a 3-mm. thickness of glass, possessed the entire range of Dorn radiations. Window glasses prepd. in Yugoslavia, Belgium and Germany were opaque to the Dorn radiations. The study is not one to compare the glasses manufd. in various countries but to show that common glasses can be prepd. at low prices and can transmit large ranges of ultraviolet radiations.</p> <p style="text-align: right;">Frank Marech</p>																			
<p>ASB-5LA METALLURGICAL LITERATURE CLASSIFICATION</p>																			
<p>ASB-5LA METALLURGICAL LITERATURE CLASSIFICATION</p>										<p>ASB-5LA METALLURGICAL LITERATURE CLASSIFICATION</p>									
<p>ASB-5LA METALLURGICAL LITERATURE CLASSIFICATION</p>										<p>ASB-5LA METALLURGICAL LITERATURE CLASSIFICATION</p>									

COMMON ELEMENTS																									
EXTRACT AND ANALYSIS													PROCESSING AND PREPARATION												
EXTRACT AND ANALYSIS													PROCESSING AND PREPARATION												
<p>Importance of rare earths for the glass industry. V. Cytrowski. <i>Skladski Rozhledy</i> 13, 21-33 (1951); <i>Ceram. Abstracts</i> 17, 274. Rare earths are used in the glass industry for the production of glasses of specific colors, e. g., signal glasses, decolorizing and the production of glasses of special phys. and optical properties. Didymium is a mixt. of Nd and Pr and is used to give a neutral</p>																									
<p>ASD-SEA METALLURGICAL LITERATURE CLASSIFICATION</p>																									

METALLURGICAL LITERATURE CLASSIFICATION																									
SUBJECT													AUTHOR												
SUBJECT													AUTHOR												
<p>Influence of rare earths on the ultraviolet light absorption by glass and its color changeability. V. Ciznyk. <i>Nalibiki Reshedy</i> 13, 94-128 (1968). (trans. Abilash 17, 350; cf. C. A. 52, 8715). To a base glass of the compn. SiO_2 60.02, Na_2O 0.22, CaO 12.00, Na_2O 4.57 and K_2O 13.01%, addns. were made of V, Cr, Nd, Ce, Pb, Co and Ti oxides, separately or in conjunction. Ultraviolet transmissions were measured on a quartz spectrograph; transmissions in the visible spectrum were measured by a spectrophotometric method employing a photoelec. photometer system. Colors produced by combinations of these oxides and the changes produced in sunlight and electric light are enumerated. C. L. R.</p>																									

CP

19

Glass Research Institute in Czechoslovakia. Václav
Tyroky. *Glass Ind.* 10, 230-2(1938). H. F. Krieger

AS 51.1 METALLURGICAL LITERATURE CLASSIFICATION

19

CA

Briquetting of glass mixes. V. Givinskii, *Nikol'skiy Zhurnal*, 1940, 11, 114. ...
 Briquetting the mix showed no evident effect on the rate of
 fusing, but hastened the penetration of heat through the
 mix. The homogeneity of the glass melt before refining
 is increased by briquetting the mix; this effect is most
 marked with Na K Ca silicate glass; less noticeable in
 Pb glass; in B silicate glass only local homogeneity is in-
 creased. The alkali loss is reduced by briquetting; also,
 the H_2O loss. The no. of bubbles is greater on the floor
 of the crucible and less on the surface of the briquetted glass
 melt. M. V. Kondolde

ASB-11.4 METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND PERIOD										3RD AND 4TH PERIOD									
PROCESSES AND PROPERTIES INDEX																			
<p>C</p> <p>What are the properties of glasses made from substitute materials? V. CRYAGOV AND Z. SCHAFER. <i>Skladish Roshidy</i>, 17, 160-76 (1940); <i>Chem. Zentr.</i>, 1942, 1, 914; <i>Chem. Abstr.</i>, 37, 2896 (1943).—Because of shortages of alkalis (soda and potash), raw materials occurring in Bohemia and Moravia have been proposed. Such materials are feldspars, granites, basalts and pegmatites, and a mixture of feldspar, lepidolite, and quartz of high alkali content from Rosna near Pernstein in Moravia. The Al_2O_3 in the rocks mentioned raises the resistance to H_2O and chemicals and improves the chemical and physical properties of the glasses.</p>																			
<p>ASB-11A METALLURGICAL LITERATURE CLASSIFICATION</p>																			
FROM SYMBOL										FROM SYMBOL									
SYMBOL										SYMBOL									

19

By what can alkalis (soda and potash) and some coloring oxides be partly replaced in the glass batch? V. Carrozz and Z. Schacter. *Silicate Technology* 17, 502 (1940); *Chem. Zentr.* 1940, II, 2301. The possibility of replacing alkalis by phonolite, granite, basalt, feldspar or lepidolite in the manufacture of glass was investigated and some compounds of glasses made with phonolite and with granite and the glass resulting are discussed. The minerals mentioned cannot be used for crystal glass because of their high Al_2O_3 , Fe_2O_3 , and FeO content. Blast-furnace slag can be used for colored bottle glass. M. V. C.

ASAC, SLA METALLURGICAL LITERATURE CLASSIFICATION

117 AND 120 CDD121										120 AND 121 CDD121									
PROCESSING AND PROPERTIES INDEX																			
<p>CA</p> <p>The care of molds in the glass industry. V. Ciynok. <i>Skladish Reshady</i> 18, 3-8(1941); <i>Chem. Zvest.</i> 1941, 11, 1031. — Lubrication of the molds with various lubricants is discussed, including the use of colloidal graphite, which gives a cohesive lubricating film which adheres well at high temps. and in the presence of water. Some of its advantages are an increase in output, reduction of waste (defective pieces), prevention of sticking of the glass to the form, a smooth and polished surface of the glass as a result of slight friction in the form, clean surface of the finished product, low rate of wear of the form, etc. Com. products used are Hydrukollag, Oildag, Aquadag and Solgra. The use of colloidal graphite as a protection against rust for glass factory machinery, especially for those parts exposed to high temps., is discussed. The use of Solgra as a protection against the formation of boiler scale is likewise discussed. Photomicrographs and a bibliography are given.</p> <p>M. G. Moore</p>																			
120 AND 121 CDD121										120 AND 121 CDD121									
120 AND 121 CDD121																			

1ST AND 2ND EDITIONS										3RD AND 4TH EDITIONS									
PROCESSING AND PROPERTY INDEX																			
CA																			
<p>Glasses which bring us nearer to the sun. V. Ctyroky. <i>Skladsk Resekedy</i> 18, 43-6(1941); <i>Chem. Zvest.</i> 1941, II, 652.—The ultraviolet absorption of ordinary glasses is discussed as are also special glasses which are transparent to wave lengths from 200 to 315 mμ. Tables are given for the following glasses: Blos, Brevos IV, Neuglas, Corax, Helio, Helvi, Removik, Samalas, Sun Ray, Ultravil, Uviol, Vita, Ultraviolet, etc. Reduction of transparency by exposure to the radiation of an arc lamp is discussed. The use of Uviol glasses and the results of practical tests, are considered from the medical point of view and from that of the structural engineer.</p> <p style="text-align: right;">M. G. Moore</p>																			
ADD. 51A METALLURGICAL LITERATURE CLASSIFICATION																			
FROM STUDY UNIT										SETTLER									
000000 00										000000 000 000 000									
000000 00										000000 000 000 000									
000000 00										000000 000 000 000									

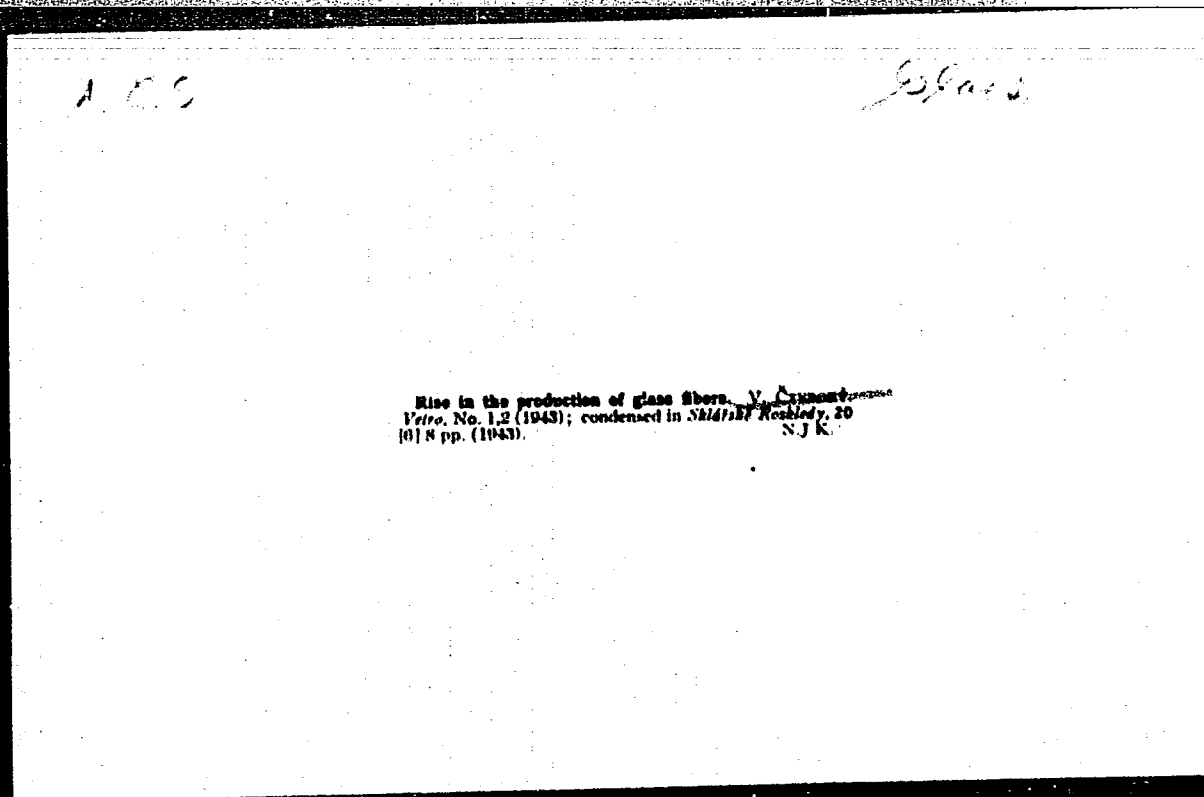
A.C.S.

Glase

Glasses colored with Nd_2O_3 , Pr_2O_3 , and selenium. V. ~~CITRUS~~. *Glastech. Ber.*, 20 [4] 103-107 (1943); ~~Schmidt~~ *Roschdy*, 10 [6] 7 pp. (1943). The dichroism of various glasses containing neodymium, praseodymium, and selenium is expressed by the variation of the difference between the ratios

a = area under transmission curve from 5800 to 7000 Å u.
 b = area under transmission curve from 4000 to 5800 Å u.
for thicknesses of 20 and 5 mm. The addition of selenium to praseodymium glasses causes an increasing positive difference a/b (20 mm.) -- a/b (5 mm.); in glasses containing praseodymium only, this difference is negative. The addition of selenium to neodymium glasses causes an increase of the positive difference a/b (10 mm.) -- a/b (5 mm.). When commercial didymium oxide containing both Nd_2O_3 and Pr_2O_3 was used, dichroism was not affected as favorably, but the intensity of coloration was increased. Comparisons and transmission curves of 18 glasses of 3 thicknesses are given. *Glastech. Ber.*, 21 [7, 8] 170-73 (1943).

~~Schmidt~~ *Roschdy*, 20 [9, 10] 5 pp. (1943). The highest amount of selenium that could be introduced by BaSeO_3 into a batch containing 40% sand, 12% limestone, 10% potash (73% K_2CO_3 , 0% H_2O , 3% K_2SO_4 , 3% KCl), 5% saltpeter, and 2 gm. arsenic was 0.115%. The coloration was increased by adding rare earths in a larger amount than that corresponding to the additive effect of selenium and the rare earths, provided the selenium content was at least 0.04%. C. concludes that the equilibrium of colored and colorless forms of selenium is shifted to the colored form by rare earths, but that below 0.04, selenium is present mostly in its colorless form. N.J.K.



Rise in the production of glass fibers. V. G. Gerasimov
Vetro, No. 1, 2 (1943); condensed in *Skidishy Reshedy*, 20
[d] 8 pp. (1943). N.J.K.

A.C.S.

Glass

Effect of chemical composition on the coloration of glasses colored with neodymium oxide. V. Crnec.

Shikhi Revue, 26, 81-85 (1943); abstracted in *Chem. Zvest.*, 1943, II (12) 1219.—The following glasses colored with neodymium oxide were investigated with regard to change of color under different spectral illumination (day-light, incandescent lamps) and at different thicknesses: lead glass (I), 56 SiO₂, 24.0 PbO, 1.3 Na₂O, 18.3% K₂O; barite glass (II), 56.0 SiO₂, 24.0 BaO, 1.3 Na₂O, 18.3% K₂O; zinc glass (III), 56.0 SiO₂, 24.0 ZnO, 1.3 Na₂O, 18.3% K₂O; borosilicate glass (IV), 60.0 SiO₂, 12.3 B₂O₃, 7.1 CaO, 1.6 Na₂O, 17.5% K₂O; lime glass (V), 68.0 SiO₂, 10.0 CaO, 5.0 Na₂O, 16.5% K₂O; all glasses contained 1.5% Nd₂O₃ were 10 mm. thick, and were polished for spectrophotometric measurements. In the range of 400 to 600 mμ, the glasses show increasing absorption in the order V, IV, II, I, III; the same holds good for the range 600 to 750 mμ with slight differences. The absorption maxima and minima between 550 and 600 mμ also show differences, a higher maximum at 570, a lower one at 590, and a minimum at 580 mμ; the differences between maximum and minimum are greatest in V and least in III. The sudden color change from 5 to 30 mm. glass thickness took place in decreasing degree in the order V, IV, II, I, III. The sudden color change under day-light to incandescent light is strongest in V and weakest in III. The III glasses, however, are always most intensely colored and the V glasses the most weakly, the order being III, I, II, IV, V. M.H.A.

1ST AND 2ND ORDERS																		3RD AND 4TH ORDERS																	
SUBJECTS AND PROPERTIES INDEX																																			
COMMON ELEMENTS GROUPS PERIODIC TABLE			<div style="float: left; width: 10%; font-size: 2em; margin-right: 10px;">CA</div> <div style="float: right; width: 10%; text-align: right;">19</div> <p>The increase of production and uses of fiber glass. V. Ceylan? <i>Silk and Wool</i> 20, 105-12(1943); Chem.</p> <p>Zinn, 1943, II, 1673; cf. G. A. 33, 6543¹. -Continuing previous reports, C. describes new manufg. methods and uses of fiber glass as material for elec., heat, sound, light and building insulation. Its use in storage batteries and in so-called glass asphalt was especially stressed. C. describes the use of glass fiber as textile material.</p> <p style="text-align: right;">J. M. Noy</p>																																
METALLURGICAL LITERATURE CLASSIFICATION																																			
SOURCE SYMBOLOGY																		SOURCE NUMBER																	
SYMBOLS FOR SOURCE																		SYMBOLS FOR DATE																	

LIST AND THE EDITOR																										LIST AND THE EDITOR																																																																																																																																	
SUBJECTS AND PROPERTIES INDEX																										SUBJECTS AND PROPERTIES INDEX																																																																																																																																	
CA																										19																																																																																																																																	
<p>Glasses colored with Na_2O and Cr_2O_3. V. Chytrak and M. Fanderlik. <i>Sakshis Koshiki</i> 20, 121-5 (1941); <i>Chim. Zvest.</i> 1944, 1, 808; cf. C.A. 37, 6077; 38, 6170. The following conclusions are apparent from tabular data reported on glasses contg. Cr_2O_3 and Na_2O: The addn. of Cr_2O_3 to Na_2O-contg. glass displaces the color tone toward the green. The influence of the Cr_2O_3 is slight in glasses 5 mm. thick (the glass is a neutral gray) but it increases with increasing thickness of the glass (green to a warm green). The addn. of Cr to Na_2O-contg. glasses causes them to lose their dichromatic character.</p> <p>M. C. Moore</p>																																																																																																																																																											
APP. 31.4 METALLURGICAL LITERATURE CLASSIFICATION																																																																																																																																																											
<table border="1"> <tr> <td colspan="26">GROUPS</td> <td colspan="26">GROUPS</td> </tr> <tr> <td colspan="26">1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26</td> <td colspan="26">1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26</td> </tr> </table>																																																				GROUPS																										GROUPS																										1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26																										1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26																									
GROUPS																										GROUPS																																																																																																																																	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26																										1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26																																																																																																																																	

Defects occurring in melts containing rocks as raw materials. N. G. GAYMOND. *Steklo i Roshchdy*, 21 (1) 7 pp. (1944).—The use of rocks as glass raw materials was limited to the U. S. before the war. The standardization of feldspars in the U. S. was cited as a model to European users. During the war feldspars and pegmatites were used in Czechoslovakia. The obvious necessity of analytical control was emphasized. The particle size of the rocky materials should not be larger than that of any other raw material; preferably it should be 0.5 to 0.1 mm. The bulk of good feldspars was 0.2 to 0.12 mm. Grains under 0.1 mm. caused lumps in the batch; particles above 0.5 mm. are usually quartz, which resists grinding. Local cords, therefore, lack alkali. The moisture must be kept under certain limits. Excellent photomicrographs illustrate practical examples. Lepidolite in pegmatite improved melting. Corundum remains unmelted. Tourmaline was hardly melted when the refractory started to dissolve. Very coarse feldspar grains melted so late that the surrounding glass contained too much Al_2O_3 and nepheline crystals formed. N. J. K.

1ST AND 2ND COLUMNS										PROCESSES AND PROPERTIES INDEX										3RD AND 4TH COLUMNS									
C										<p>Electrical furnaces in the Jablonec glass industry. V. CRYNOXY. <i>Skladski Rozhledy</i>, 23, 2-8 (1947).—C. describes new type electrical furnaces for pressing objects for the Jablonec jewelry industry (1) from blanks and (2) from small rods. The working temperature of the first furnace is 1120°C, its energy requirement is 8 kw.-hr., and the saving compared with a traditional coal furnace is 40%. The energy requirement of the second furnace is 1.8 kw.-hr. The report is based on an actual working period of several months. For a fundamental description of the furnaces see <i>ibid.</i>, 22 [1, 2] 9 (1946). N.I.K.</p>																			
ASB-51A DETALLURGICAL LITERATURE CLASSIFICATION										1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									
1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS										1ST AND 2ND COLUMNS									

1ST AND 2ND ORDERS										PROCESSES AND PROPERTIES INDEX										1ST AND 2ND ORDERS									
COMMON ELEMENTS										C										COMMON ELEMENTS									
MATERIALS INDEX										<p>Study of glassmelting sands. V. Cvrkox. <i>Skidishé Roskedy</i>, 23 [2, 3] 22-34 (1947).—The effect of the quality sands of Silec in Bohemia on the melting process was subjected to an extensive study. Coarse grains above 0.6 mm. had to be removed for soda-lime batches. More than 0.5% fines in flint glasses was found objectionable. The use of the washing and separating procedures proposed is believed to place this sand in the group of well-known excellent glass sands.</p> <p>N.I.K.</p>										MATERIALS INDEX									
METALLURGICAL LITERATURE CLASSIFICATION										METALLURGICAL LITERATURE CLASSIFICATION										METALLURGICAL LITERATURE CLASSIFICATION									
1ST AND 2ND ORDERS										1ST AND 2ND ORDERS										1ST AND 2ND ORDERS									

101 AND 2ND CROSS

PROCESSING AND PROPERTIES INDEX

102 AND 8TH CROSS

COMMON ELEMENTS

COMMON VARIABLE NOTES

20-10

C

Studies of some special glasses absorbing ultraviolet rays and transmitting visible light. V. CERNY. *Shklovet'skiy*, 23 [5] 97-114 (1947). For light absorption in the near ultraviolet and low absorption as well as color transparency in visible light, glasses containing 2 to 3 CeO₂ and 0.01 to 0.02% CoO were found well suited. Ultraviolet absorption extends to 370 mμ. At 3 mm. the glasses are nearly colorless. Spectrophotographs of all glasses and representative curves are given. At 8 mm. the soda-lime glass containing 1.9 CeO₂ and 0.0047% CoO, which exhibits fair neutrality on the International Commission on Illumination color coordinates, was found best. Tests were made on fading, under the Hg lamp and sunlight, of textiles, leather, and paper covered by these glasses. Cerium and vanadium absorb ultraviolet rays best but are somewhat greenish. Preferred combinations were 1.9 to 0.6 CeO₂ with 0.5 to 2% V₂O₅. Titanium glasses did not absorb enough ultraviolet; chromium glasses absorbed too much visible light. N. J. K.

ASM-15-A METALLURGICAL LITERATURE CLASSIFICATION

FROM BOWEN

101

102 AND 8TH CROSS

COMMON VARIABLE NOTES

20-10

C

131 AND 130 INDEX		PROCESSING AND PROPERTIES INDEX		137 AND 132 INDEX	
<div style="position: absolute; top: 10px; left: 10px; font-size: 2em; font-weight: bold;">CA</div> <div style="position: absolute; top: 10px; right: 10px; font-size: 2em; font-weight: bold;">19</div> <div style="position: absolute; top: 350px; left: 350px; width: 600px; height: 250px; border: 1px solid black; padding: 10px;"> <p>A study of some special ultraviolet absorbing glasses which are transparent to visible radiation. V. Cizmek (Klward Benel Glass Research Inst., Hradec Kralove, Czechoslovakia). <i>J. Soc. Glass Technol.</i> 32, No. 144, 40-5(1948).--The effect has been detd. of adding varying amts. of CeO_2, V_2O_5, TiO_2, Cr_2O_3, and of combinations of them (and also CoO) on the color and spectral transmission of a soda-potash-lime-silica and of several soda-lime-silica glasses. From the results, several possible com. glasses were devised for protecting leather, plain and dyed, dyed silks, and writing paper from change of tint due to the ultraviolet in sunlight. The glass regarded as best had the batch compn. (parts by wt.): sand 704, limestone 240, soda (with 15% H_2O) 300, CeO_2 19.8, CoO 0.03. H. F. Krieger</p> </div>		<div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 0.8em;">COMMON ELEMENTS</div>		<div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 0.8em;">COMMON VARIABLE INDEX</div>	
<div style="display: flex; justify-content: space-between;"> 131 AND 130 INDEX 137 AND 132 INDEX </div>					
<div style="display: flex; justify-content: space-between;"> 131 AND 130 INDEX 137 AND 132 INDEX </div>					

CUACHOVA, L.

NAVRAIL, M. MUDr.; KRECEK, V.; CUACHOVA, L.

Incidence of emphysema in workers of an asbestos factory. Pracovní
lek. 9 no.2:111-116 Apr 57.

1. Ustav hygieny prace a chorob z povolani, praha, reditel prof.
MUDr Jaroslav Telsinger.

(EMPHYSEMA, PULMONARY, statist.
in asbestos workers (Cz))

(INDUSTRIAL HYGIENE,
incidence of pulm. emphysema in asbestos workers (Cz))

CUBELIC, M.

"Detection of ions in oil field waters." p. 389. (Nafta. Vol. 4, no. 12, Dec. 1953. Zagreb.)

SO: Monthly List of East European Accessions, Vol. 3, no. 6, Library of Congress, June 1954.
Uncl.

CUBELIC, M.

drilling

✓ 1521. Treating drilling muds with carboxymethylcellulose. M. Cubelic. *Nafta* (Yugoslavia), March 1953, 4 (3), 93-6.---The paper describes the properties of carboxymethylcellulose and its action on bentonite type drilling muds. Laboratory experiments as well as field tests with commercial products (Tylose, Kalle and Co., Wiesbaden-Bleibach) gave very satisfactory results. (Author's Summary.)

CUBELIC, M.

Cathodic protection of pipelines.

p. 227

Vol. 6, no. 7, 1955, July

NAFTA

Zagreb

So: East European Accessions List (EEAL), LC. Vol. 5, no. 2, Feb. 1956

CUBERI, Bashkim, dr.

Medico-legal documentation and its importance. Shendet pop. 23
no.5:56-58 '62.

1. Kyre ekspert mjeko ligjor.
(JURISPRUDENCE)

CUBERI, Bashkim

A case of fatal poisoning by isoniazid. Bul. univ. shtet.
Tirane[Mjek] 4:80-83 '62.

(ISONIAZID TOXICOLOGY)

CUBERI, Bashkim

Medico-legal evaluation of thoracic wounds. Bul, Univ. Shtet.
Tirane no. 3/4: 38-42 '63.

1. Katedra e patologjise pergjitheshme - sektori mjekoligor,
Universitetit Shteteror te Tiranes.

CUBLESAN, Maria, MD

RUMANIA

ILEA, Th., Professor; CALOENESCU, I., MD; CUBLESAN, Maria, MD;
DRAGUSANU, I., MD.

Bucharest, Igiena, No 6, Nov-Dec 63, pp 551=556

"Outpatient Care of Workmen on Construction Sites"

CUBOVA, J.; HON, I.

Production of tinsel yarn goods. p. 242. TEX IL. (Ministerstvo lehkeho prumyslu) Praha. Vol. 9, no. 8, Aug. 1954.

SOURCE: East European Accessions List, Vol. 5, no. 9, September 1956

S/081/62/000/005/048/112
B151/B101

AUTHORS: Laca, M., Marković, Tihomil, Cubranić, A.

TITLE: Curves of corrosive flow - pH of medium for lead submerged
in organic acids

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 5, 1962, 361, abstract
5I208 (Glasnik Khem. drushtva, v. 23-24, nos. 7-10, 1958-1959,
401-408)

TEXT: The mechanism of Pb corrosion in several organic acids is studied.
The rate of Pb corrosion in HCOOH at low concentrations is determined by the
diffusion processes. The kinetics of Pb corrosion in COOH-COOH is
determined by the solubility of $Pb(COO)_2$ formed on the surface of the
object. The rate of Pb corrosion in CH_3COOH at pH 2.5 with a constant rate
of O_2 feed is at first accelerated and then falls as a result of the
passivation of the Pb surface. [Abstracter's note: Complete translation.]

Card 1/1

CUBRANIC, N.

Precision of height conjunction of island by trigonometric leveling. (To be contd.) p. 75. GEODETSKI LIST. Zagreb. Recurrent features: Terminology; Reveiw of domestic and foreign periodicals; News. Vol. 10, no. 3/4, Mar./Apr. 1956.

SOURCE: East European Accessions List, (EEAL),
Library of Congress Vol. 5, no. 11, Nov., 1956.

CUBRANIC, N.

Precision of height conjunction of islands by trigonometric leveling.
(Conclusion) p. 125; GEODETSKI LIST. (Drustvo geodeta Hrvatske) Zagreb;
Vol. 10, no. 5/6, May/June 1956.

SOURCE: East European Accessions List (EEAL), Library of Congress,
Vol. 5, No. 12, December 1956.

CUBRILOVIC, Branko, 1894-

Hajduk Pecijsa, 1826-1875. Sarajevo. Narodna prosvjeta 1954. 71 p. (Mala biblioteka za narodno prosvjecivanje, 19)

CU

1. Pecijsa, Hajduk, 1826-1875. 2. Bosnia and Herzegovina.

CUBRIC, D.

Center for analysis of the meteorological service in the USA. p.531.

VAZDUHOPLOVNI GLASNIK. (Jugoslovensko ratno vazduhoplovstvo) Zemun, Yugoslavia
Vol. 11, no. 4, July/Aug. 1955

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 9, Sept. 1959.

Uncl.

CUBRILOVIC, Branko, Teslic

Carbonic acid spas and their curative power; experiences from
Vrucica Spa, near Teslic, Bosnia. Med. arh., Sarajevo 8 no.3:
111-118 May-June 54.

(BALNEOLOGY
carbonated spas in Yugosl.)

GUBRILOVIC, Branko, Dr., Teslic

Hypertension. Med. arch., Sarajevo 9 no.4:139-153 July-Aug 55.

(HYPERTENSION,
(Ser))

CUC, M.

Design for a prefabricated reinforced concrete construction of an administrative service building. p. 178. (Pozemni Stavby, Vol. 5, No. 4, Apr 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

CUC, M., inz.; SOBOTKA, M., inz.

Conference on improvement of concrete reinforcing steel and development of reinforcing material production. Poz stavby 11 no.1:52-53 '63.

1. Odbor stavebnictví, Statní komise pro rozvoj a koordinaci vedy a technicky.

CUC, M; CITEK, A.

Glued roof trusses for housing units of the T-01.b, T-02 B, and T-03 B types.
p. 651

POZEMNI STAVBY. (Ministerstvo stavebnictví) Praha, Czechoslovakia, Vol.
7, no. 12, 1959

Monthly List of East European Accessions (EEAI), LC. Vol. 9, no. 2,
Feb. 1960

Uncl.

CUCANCIC, Ladislav, dr inz.

High-speed 20-channel analyzer of electric-pulse amplitudes. Elektr
vest 17 no.1/2:12-16, 33-35 Ja-F '64.

1. Ruder Boskovic Institute, Zagreb, Bijenicka 54.

CUCERIIVIH, E.

Cuceriaviih, E. Costiuc, M.

"Study of root systems and respiration of trees." p. 57.

(Analele Romano-Sovietice. Seria Silvicultura-Industria Lemnului Si A Hartiel.,
Series a II-a, v. 7, no. 15, Sept/Oct. 1952, Bucuresti)

SO: Monthly List of East European Accessions, Vol. 2, No. 9, Library of Congress, September
1953, Uncl.

CUCHRA, ALICJA

BARTNIK, Tadeusz; PIEKUTOWSKA, Barbara; CUCHRA, Alicja

Determination of health situation and of health work in the village.
Cesk. zdravot. 5 no.3:185-193 Mar 57.

1. Prace studentskeho vedeckeho krousku pri katedre organisace
zdravotnictvi (vedouci katedry lekarske akademie ve Varsave Doc.
Dr. J. Krupinski).

(RURAL CONDITIONS,

pub. health in Poland (Pol))

LISZEWSKA, Danuta; SLIDZIEWSKI, Konstanty; RUDNICKI, Stanislaw;
GRUDZINSKA, Wacława; CUCHRA, Alicja

Clinical usefulness of Schnur's and Peele's prognostic
indices in myocardial infarction. Pol. tyg. lek. 20 no.40:
1496-1499 4 0 '65.

1. Z IV Kliniki Chorob Wewnętrznych AM w Warszawie (Kierownik:
prof. dr. med. A. Askanas).

L 30928-66 T/EWP(t)/ETI IJP(c) JD

ACC NR: AP6022925

SOURCE CODE: CZ/0030/65/000/012/0377/0378

AUTHOR: Cuchy, Z.

ORG: Research Institute of Single Crystals, Turnov (Vyzkumny ustav monokrystalu)

TITLE: Infrared filters with absorption edges in the region of 0.8 to 6 m

SOURCE: Jemna mechanika a optika, no. 12, 1965, 377-378

TOPIC TAGS: IR filter, IR absorption, IR radiation, crystal, potassium chloride, silver chloride, sulfide

ABSTRACT: Additively colored potassium chloride and silver chloride crystals with a chemically created silver sulfide layer can be used as absorption filters suppressing totally the visible and near infrared regions and transmitting the long-wave infrared radiation. Orig. art. has: 3 figures and 2 tables. [Based on author's Eng. abst.] [JPRS]

SUB CODE: 20 / SUBM DATE: 02Jun65 / ORIG REF: 003 / SOV REF: 001
OTH REF: 005

Card 1/1 CC

UDC: 666.247.3 535.345.6-15

0915

1001

CUCHY, Z.

"Crystal orientation by means of a diffraction Laue pattern."

JEMNA MECHANIKA A OPTIKA, Praha, Czechoslovakia, Vol. 4, No. 6, June 1959.

Monthly List of East European Accessions (EEAI), IC, Vol. 8, No. 9, September 1959.

Unclassified.

CUCHY, Zd., inz.

Toric mirrors. Jemna meeh opt 6 no.12:368-369 D '61.

1. Vyzkumny ustav mineralu, Turnov.

24.3700 (1051, 1057, 1106)

z/013/62/000/003/001/001
D006/D102

AUTHORS: Cuchý, Zdeněk, Engineer, and Dědek, Josef

TITLE: Manufacture of an extra-axial paraboloidal mirror

PERIODICAL: Sklár a keramik, no. 3, 1962, 82-84

TEXT: The technology of piecemeal manufacture of aspherical mirrors at the Výzkumný ústav monokrystalů (Single Crystals Research Institute) in Turnov is described with emphasis on final figuring. To obtain extra-axial, concave, paraboloid mirrors of 80-mm diameter with a 20° angle of extra-axiality and a 314-mm focus, a 320-mm-diameter paraboloidal mirror is ground from Simax-type glass with a focal aperture of 1:1.02, and with the focus maintained in all zones of the mirror diameter within ± 0.05 mm, using a special grinding tool designed by I. Šolc. The tool consists of seven concentric metal rings loosely fitting into each other in such a way that each ring can individually be weighted. The tool is driven by a conventional Koerger-type polishing machine. A modified spherometer was used for checking the paraboloid shape during rough grinding.

Card 1/2

Manufacture of an extra-axial ...

Z/013/62/000/003/001/001
D006/D102

Final figuring with pitch lap was made using the Hartmann and Chikolev tests. The Foucault test in an autocollimating arrangement was also tried. As the final step, extra-axial mirrors were cut out of the paraboloidal mirror. There are 9 figures and 1 table. The most important English-language reference reads as follows: F. Twyman, F.R.S. Prism and Lens making.

ASSOCIATION: Výzkumný ústav monokrystalů (Single Crystals Research Institute),
Turnov

Card 2/2

L 37020-66 EWT(1)/T/EWP(t)/ETI IJP(c) JD/GG
 ACC NR: AP6027067 SOURCE CODE: CZ/0030/66/000/003/0070/0073
 AUTHOR: Sommer, I. W. (Engineer); Cuchy, Z. (Engineer) 4/9
 6
 ORG: [Sommer] Physics Laboratory, Faculty of Natural Sciences, J. E. Purkyně University, Brno (Laborator fyziky prirodovedecke fak. university J. E. Purkyně); [Cuchy] Research Institute of Single Crystals, Turnov (Vyzkumny ustav monokrystalu)
 TITLE: Evaluation of the mosaic structure of single crystals
 SOURCE: Jemna mechanika a optika, no. 3, 1966, 70-73
 TOPIC TAGS: single crystal, crystal structure, goniometer, angular distribution
 ABSTRACT: Methods of comparison of the disorientation of the mosaic structure are described and compared; with the x-ray goniometer, exactness under one minute can be attained. A quantitative determination of the mosaic disorientation and of its angular distribution in crystals permits a suitable choice of crystals or of a crystal section with a possibly perfect structure. Orig. art. has: 7 figures, 3 formulas, and 3 tables. [Based on authors' Eng. abst.] [JPRS: 36,465]
 SUB CODE: 20, 17, 12 / SUBM DATE: 08Jun65 / ORIG REF: 006 / SOV REF: 001
 OTH REF: 007
 Card 1/1 UDC: 548.73
 2917 0000

CUCHY, Zd., inz.; SUCHMAN, R., promovany matematik

Silver chloride plate polarizer for infrared radiation zone. Jemna
mech opt 8. no.2:46-48 F '63.

1. Vyzkumny ustav monokrystalu, Turnov.

PETRU, Frantisek; POPELA, Bohumir; KULHANEK, Jan; CUCHY, Zdenek; BOBEK, Milan;
VITAK, Frantisek

Small infrared spectrophotometer. Chem listy 57 no.9:964-972
S '63.

1. Ustav pristrojove techniky, Ceskoslovenska akademie ved, Brno
a Vyzkumny ustav monokrystalu, Turnov.

hydrogen ammonium benzoate monohydrate and water

100.0000

100.0000

ENCL: 00

SUP CODE: 11

100.0000

ENCL: 00

100.0000

Card 1/1

CUCHY, Z.

Dichroism of NaNO_3 single crystals in ultraviolet and infrared regions. Chekhosl fiz zhurnal 14 no.1:26-28 '64.

1. Research Institute of Monocrystals, Turnov.

BURDUJA, I., conf.; CUCIUREANU, A., ing.

A new method of calculation for determining the production capacity and its applicable use in the integrated bast fiber enterprises. Ind. text Rum 15 no.7:358-367 J1 '64

1. Polytechnic Institute, Iasi.

CUCIUREANU, Elena

SOLOMON-IONESCU-continued RUMANIA

Pharmacist

Institute for the State Control of Medicines and Pharmaceutical Research
(Institutul pentru Controlul de Stat al Medicamentelor si Cercetari
Farmaceutice).

Bucharest, Farmacia, Revista a Uniunii Societatilor de Stiinte Medicale
din Republica Populara Romina, No 9, Vol X, Sep 62, pp 551-553.

"Contributions to the Study of the Quantitative Determination of
Neostigmine Bromides in Tablets."

Co-authors: SOLOMON-IONESCU, IRINA
PRODESCU, MARIA

1 copy

~~2002~~

RUMANIA

BERAL, H.; MUREA, L.; WERMESCHER, B.; MADGEARU, M.; CUCIUREANU, E.

Institute of State Control of Medicines and Pharmaceutical
Research (Institutul pentru controlul de stat al
medicamentelor si cercetari farmaceutice) - (for all)

Bucharest, Farmacia, No 3, Mar 63, pp 161-168.

"Application of Ampermetric Titration Methods with two Indicative
Electrodes in the Control of Drugs. VII. Study of the
Conditions of Ampermetric Titration of Certain Sulfonamides
with a Silver Nitrate Solution."

(5)

L 31452-66 EWP(t)/ETI IJP(c) JD/J8

ACC NR: AP6023182

SOURCE CODE: RU/0003/65/016/002/0105/0105

AUTHOR: Beral, H.; Wermescher, B.; Murea, L.; Cuciureanu, El.; Madgearu, M.

ORG: Institute for the State Control of Drugs and Pharmaceutical Research (Institutul pentru controlul de stat al medicamentelor si cercotari farmaceutice)

TITLE: Study of the method of amperometric determination using cerium sulphate as titration agent with special application to the determination of promethazine

SOURCE: Revista de chimie, v. 16, no. 2, 1965, 105

TOPIC TAGS: amperometric titration, cerium compound

ABSTRACT: The authors found that amperometric titration using cerium sulfate is a satisfactory method for the determination of promethazine with an applied current of 10 to 200 millivolt, 2 platinum electrodes and the sulfuric acid concentration maintained at 2.5 N. The error of the method is within ± 0.70 percent. Orig. art. has: 1 figure and 1 table. [JPRS]

SUB CODE: 07 / SUBM DATE: none / OTH REF: 002

Card 1/1